

**Amendments to the Specification:**

Please add, between page 3, line 28 and page 4, line 1, the following new paragraph:

One embodiment of the invention is an electronic PCM device that includes: a body of semiconductor material having lower surface; a dielectric layer extending on top of the body; and a PCM memory cell that includes a PCM storage element formed in the dielectric layer and a selection element. The storage element is formed by a heater element and a storage region. The storage region is of chalcogenic material and is in electric contact with the heater element, wherein the heater element has an end face extending transversely to the lower surface and forming a contact area with the storage region.